



Setti D. Warren
Mayor

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Candace Havens
Director

| | |
|--------------------------------|----------------|
| Public Hearing Date: | April 12, 2011 |
| Land Use Action Date: | June 7, 2011 |
| Board of Aldermen Action Date: | June 20, 2011 |
| 90-Day Expiration Date: | July 5, 2011 |

DATE: April 9, 2011

TO: Board of Aldermen

FROM: Candace Havens, Director of Planning and Development
Eve Tapper, Chief Planner for Current Planning ET
Derek Valentine, Senior Planner

SUBJECT: #61-11 NEW CINGULAR WIRELESS BY AT&T MOBILITY/ANDOVER NEWTON THEOLOGICAL SCHOOL petition for SPECIAL PERMIT/SITE PLAN APPROVAL, to add three antennas to an existing array of six antennas on a rooftop with ancillary equipment located inside an adjacent building at 216 HERRICK ROAD, Ward 6, Newton Centre on land known as SBL 65, 19, 45, containing ≈871,960 sq. ft. of land in a district zoned SINGLE RESIDENCE 2. Ref: Sec 30-24, 30-23, 30-18(c) of the City of Newton Rev Zoning Ord, 2007, and Special Permit #722-86.

The purpose of this memorandum is to provide the Board of Aldermen and the public with technical information and planning analysis which may be useful in the special permit decision making process of the Board of Aldermen. The Planning Department's intention is to provide a balanced view of the issues with the information it has at the time of the public hearing. There may be other information presented at or after the public hearing that the Land Use Committee of the Board of Aldermen will want to consider in its discussion at a subsequent Working Session.



EXECUTIVE SUMMARY

The location of the proposed new equipment is atop one of the campus buildings in the geographic center of the campus of the Andover Newton Theological Seminary. Three new antennas would be added to six antennas which already exist on arrays on the building. These improvements will update AT&T's system to a 4G network to provide better service to the Newton area. The original arrays were installed in 1986 under Special Permit #722-86. Records indicate that the arrays permitted in 1986 originally included 12 antennas, but six of them were removed in 2007 due to improvements in technology. In addition to adding three antennas to the six-antenna array, the petitioner will be adding additional ancillary equipment inside one of the adjacent campus buildings. This equipment will not be visible from the exterior of the building. There will be no additional noise generated as part of this petition. The only sources of existing exterior noise are the air conditioning condensers and no changes are proposed to this condition. Although the existing arrays are not the most attractive part of the historic structure, three more panels are not expected to have an additional impact on the surrounding area, especially since the antennas are located on the interior of the campus away from adjacent homes and streets.

I. SIGNIFICANT ISSUES FOR CONSIDERATION

1. In reviewing this petition the Board should consider whether the public convenience and welfare will be served through the installation of the antennas on the roof of the building because:
 - a. The wireless installation is located in the middle of a large campus and is not visible from adjacent streets and properties.
 - b. All new ancillary equipment will be located in an existing campus building and will be away from abutters and streets and will not create any additional noise.
 - c. This wireless provider will be able to provide greater coverage and improved services for its customers with the installation of equipment at this location.
 - d. The *2007 Newton Comprehensive Plan* does not explicitly reference wireless installations, however colocation is preferred to adding additional wireless sites because it helps to preserve the character of the City.
 - e. The wireless communication equipment will be constructed in accordance with Newton Zoning Ordinance section 30-18(A).

II. CHARACTERISTICS OF THE SITE AND NEIGHBORHOOD

A. Neighborhood and Zoning

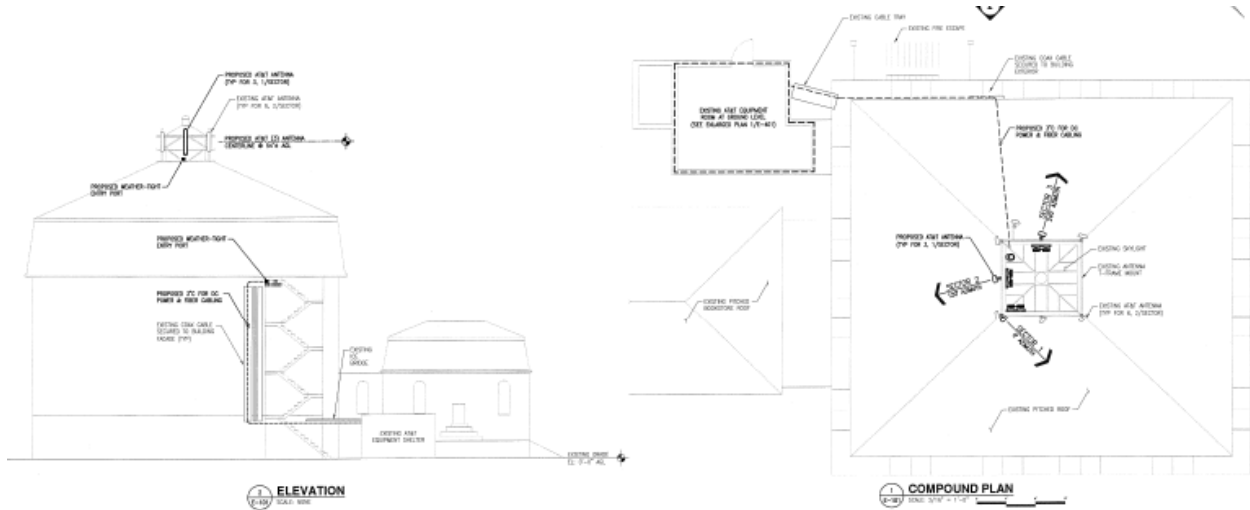
The building is located in the center of the large Andover Newton Theological Seminary campus in the Single Residence 2 zone. This institutional use is surrounded by single- and multi-family residential uses. The site is bordered on all

sides by the Single Residence 3 and Multi-Residence 1 zones.

B. Site

The campus is comprised of 871,960 square feet of land at 101-239 Herrick Road in Newton Centre. It features a number of buildings spread across the acreage. The proposed wireless equipment location is atop a late 19th-century mansard roofed building.

III. PROJECT DESCRIPTION AND ANALYSIS



A. Land Use

The site is in institutional use and will continue to be used as such, with the addition of more wireless equipment atop this building.

B. Site Design

The proposed upgrade involves the addition of three panel antennas, one to each of the existing arrays mounted on the roof around the skylight. Section 30-18A requires that “all wireless communication equipment be sited, screened, and/or painted or otherwise colored or finished to blend with the building...” The current array does not blend with the building, nor will the additional panels. However, after consulting with the petitioner during the Development Review Team process, it was determined that little can be done to improve the appearance of the existing and proposed equipment. The proposed panels will be painted in a gray tone in an attempt to make them blend with their background. Since the equipment is located on the interior of the campus, it will not impact the adjacent neighborhood.

The Senior Preservation Planner has reviewed the application and has determined

that the addition of three more panels is not likely to substantially impact the site, which is located on the National Register of Historic Places.

C. Parking and Circulation

Since the equipment will be located on an existing campus building, it will be accessed by the system of roadways on the interior of the campus. The new array is not expected to generate any significant traffic, other than the very infrequent maintenance vehicles.

D. Landscape Screening and Lighting

No landscape screening is proposed at this time. Since the arrays are already in place and all ancillary equipment will be located indoors, there is no need for additional landscaping. The campus is already well-landscaped with a number of mature trees in the vicinity.

IV. COMPREHENSIVE PLAN

There is little discussion of wireless installations in the 2007 *Newton Comprehensive Plan*. However, the *Comprehensive Plan* says that “development is to be guided to reflect the character held or sought by existing residential neighborhoods, protecting the qualities of that which exists.” By adding additional wireless antennas to an existing installation, this proposal minimizes changes to the character of this site and minimizes potential changes to the character of other sites which would otherwise be host to this equipment

V. TECHNICAL REVIEW

A. Technical Considerations (Section 30-18A). The Zoning Review Memorandum (**SEE ATTACHMENT “C”**) provides an analysis of the proposal. The petitioner seeks a special permit and site plan approval under Newton Zoning Ordinance Section 30-24 and 30-23, respectively. The petitioner must comply with all requirements of Section 30-18A(c), which governs the installation of new wireless equipment. Although the original Board Order #722-86 does not contain any unique conditions beyond what is normally included, the Planning Department recommends combining the board orders as part of this petition.

B. Parking Requirements (Section 30-19). The proposed changes do not trigger any additional parking requirements.

C. Other Reviews

1. Engineering. No engineering review is necessary because the petition will not increase or modify impervious coverage on-site or require any changes at ground level.
2. Fire Department. Because there are no changes to the site plan other than the addition of three antennas, no fire access review is necessary. Fire prevention review will occur as part of the Building Permit application process.

VI. ZONING RELIEFS SOUGHT

Based on the completed Zoning Review (**SEE ATTACHMENT "C"**) the petitioner is seeking approval through or relief from:

- §30-18A(c) to satisfy all conditions of the wireless ordinance
- §30-23 for site plan approval
- §30-24 for issuance of a special permit

VII. Summary of Petitioner's Responsibilities

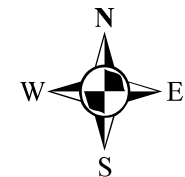
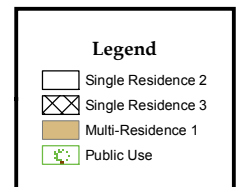
This petition is complete at this time.

ATTACHMENTS

- ATTACHMENT A: Zoning Map**
- ATTACHMENT B: Land Use Map**
- ATTACHMENT C: Zoning Review Memorandum**
- ATTACHMENT D: Draft Board Order #61-11**
- ATTACHMENT E: Acoustical Report**
- ATTACHMENT F: Board Order #722-86**

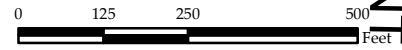
216 Herrick Rd Vicinity Zoning

*City of Newton,
Massachusetts*



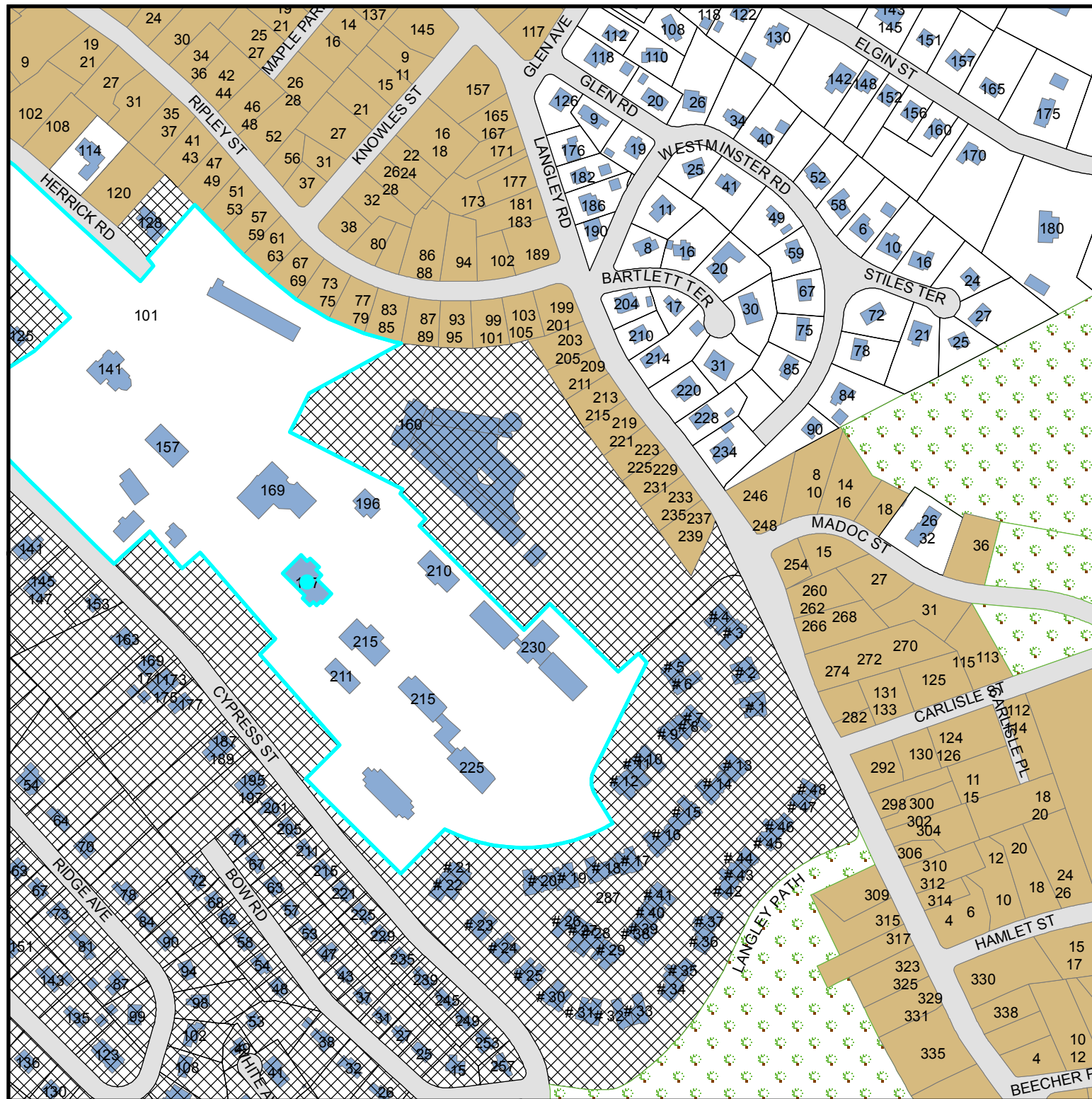
The information on this map is from the Newton Geographic Information System (GIS). The City of Newton cannot guarantee the accuracy of this information. Each user of this map is responsible for determining its suitability for his or her intended purpose. City departments will not necessarily approve applications based solely on GIS data.

CITY OF NEWTON, MASSACHUSETTS
Mayor - Setti D. Warren
GIS Administrator - Douglas Greenfield



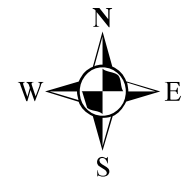
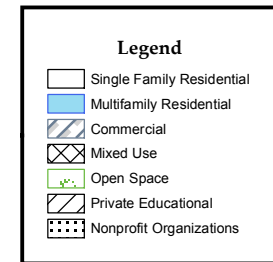
MAP DATE: April 06, 2011

ATTACHMENT A



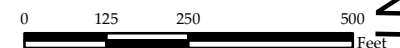
216 Herrick Rd Vicinity Land Use

*City of Newton,
Massachusetts*



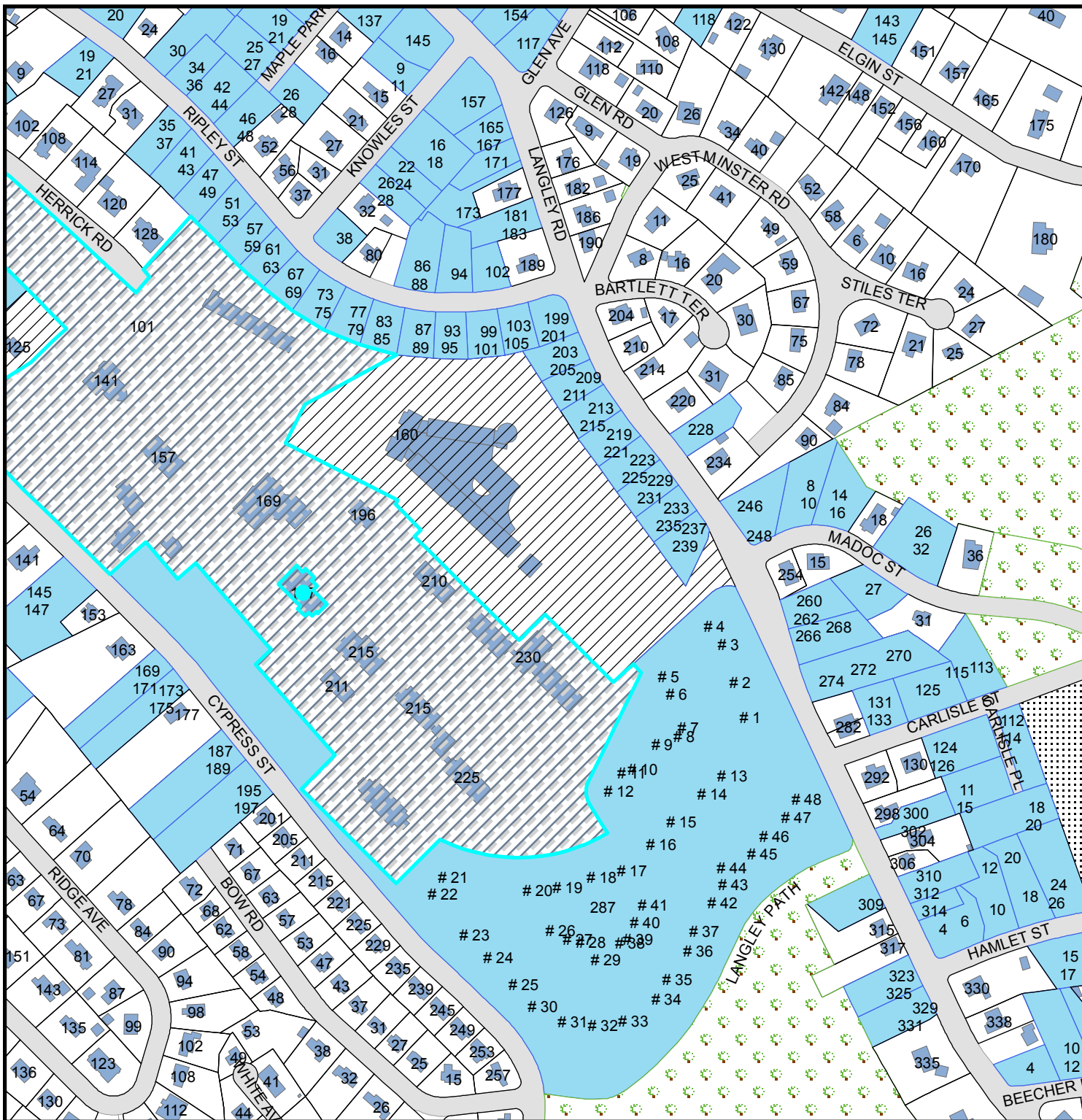
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CITY OF NEWTON, MASSACHUSETTS
Mayor - Setti D. Warren
GIS Administrator - Douglas Greenfield



MAP DATE: April 06, 2011

ATTACHMENT B



Zoning Review Memorandum

Date: March 2, 2011

To: John Lojek, Commissioner of Inspectional Services

Fr: Seth Zeren, Chief Zoning Code Official
Eve Tapper, Chief Planner for Current Planning

Cc: Joan Costello, Site Acquisition Manager
Candace Havens, Director of Planning and Development
Ouida Young, Associate City Solicitor

RE: Request to expand a wireless communications installation previously allowed by special permit

| Applicant: New Cingular Wireless/AT&T Mobility | |
|---|--|
| Site: 216 Herrick Road | SBL: 65019 0045AA |
| Zoning: SR2 | Lot Area: 871,960 square feet |
| Current use: Wireless Communications | Proposed use: Wireless Communications |

Background:

The property at 216 Herrick Road is part of Andover Newton Theological Seminary's larger campus, 101-239 Herrick Road. The total campus consists of 871,960 square feet of land in the SR2 zone. The wireless communications installation in question is located atop one of the campus buildings. In 1986, prior to the current Newton wireless ordinance, the Board of Aldermen granted a special permit (B.O. #722-86) to Cellular One (now New Cingular Wireless/AT&T Mobility) to install the existing wireless facility including six antennae and associated equipment. The applicant now proposes to add three antennae to the existing site to modernize their services.

The following review is based on plans and materials submitted to date as noted below.

Plans and materials reviewed:

- Site Plan, Turning Mill Consultants, James P. Stroke, Professional Engineer, signed and stamped, 11/12/10
 - Title Sheet
 - General Notes
 - Property Plan
 - Compound Plan and Elevation
 - Enlarged Plan and Details
 - Electrical Schematic Diagrams
- Copy of "Third Amendment to Lease" allowing lessee to expand use
- Copy of Board Order #772-86
- FCC Licenses, dated April 2009

- Report of Radio Frequency Engineer, certifying compliance with State and Federal regulations, signed by Kevin Breuer, RF Engineer, 1/15/11
- Acoustical report certifying no increase in exterior noise, signed by Eric L. Reuter, INCE Bd. Cert., 1/18/11.
- Photo simulations showing proposed antennae, prepared by ER Photo Simulations, photos taken 11/8/10, drawings done 7/12/10

Administrative determinations:

1. A previous special permit, B.O. #722-86, was granted in 1986 allowing the existing wireless installation. This special permit predates the existing wireless ordinance. The applicant's proposal to add three antennae represents a substantial expansion of the original special permit, requiring an amendment to it. The current proposal must conform to the requirements of the wireless ordinance and should incorporate all previous special permit requirements. The applicant must also amend the site plan, showing all existing and proposed structures and equipment, per the requirements of Sections 30-18A(f) and 30-23 for site plan review.
2. The applicant has submitted a letter from an RF engineer certifying that the proposed wireless equipment meets State and Federal requirements, per 30-18A(c)(1). The applicant has also submitted a letter from an acoustical engineer certifying that the building will not produce any additional exterior noise per 30-18A(c)(12).
3. The applicant must agree to remove all wireless communication equipment within thirty days following the cessation of its use, per Section 30-18A(c)(2).
4. Section 30-18A(c)(3) requires that "all wireless communications equipment shall be sited, screened, and or painted... to blend in with the building..." on which it is located. This requirement did not exist when the equipment was originally permitted. The Board should evaluate the proposed equipment to determine if it meets this standard and, if not, consider potential mitigations.
5. The proposed site plan and project description meets all other requirements of Section 30-18A(c).
6. A condition of the special permit must be that the applicant allow co-location on the structure of wireless communication equipment by other wireless communication providers, per Section 30-18A(e)(7)e).
7. See "Zoning Relief Summary" below:

| <i>Zoning Relief Summary</i> | | |
|-------------------------------------|--|-------------------------------|
| <i>Ordinance</i> | <i>Site</i> | <i>Action Required</i> |
| | Amend existing special permit pursuant to B.O. #722-86 | Amendment to B.O. #722-86 |
| | Amend site plan, pursuant to B.O. #722-86 | Amendment to B.O. #722-86 |
| §30-18A(c) | Satisfy all conditions | |

ATTACHMENT D

DRAFT
#61-11

CITY OF NEWTON IN BOARD OF ALDERMEN

April 11, 2011

ORDERED:

That the Board, finding that the public convenience and welfare will be substantially served by its action and that said action will be without substantial detriment to the public good, and without substantially derogating from the intent or purpose of the Zoning Ordinance, hereby grants the following SPECIAL PERMIT and SITE PLAN APPROVAL, to add three antennas to an existing array of six antennas on a rooftop with ancillary equipment located inside an adjacent building, in accordance with the recommendation of the Land Use Committee and the reasons given by the Committee therefore, through its Chairman, Alderman Hess-Mahan:

1. In reviewing this petition the Board should consider whether the public convenience and welfare will be served through the installation of the antennas on the roof of the building because:
 - a. The wireless installation is located in the middle of a large campus and is not visible from adjacent streets and properties.
 - b. All new ancillary equipment will be located in an existing campus building and will be away from abutters and streets and will not create any additional noise.
 - c. This wireless provider will be able to provide greater coverage and improved services for its customers with the installation of equipment at this location.
 - d. The *2007 Newton Comprehensive Plan* does not explicitly reference wireless installations, however colocation is preferred to adding additional wireless sites because it helps to preserve the character of the City.
 - e. The wireless communication equipment will be constructed in accordance with Newton Zoning Ordinance section 30-18(A).

PETITION NUMBER: #61-11

PETITIONER: New Cingular Wireless by AT&T Mobility

LOCATION: 216 Herrick Road, Ward 6, Newton Centre, SBL 65,19,45, on 871,960 sq. ft. of land.

OWNER: Andover Newton Theological Society

ADDRESS OF OWNER: 101-239 Herrick Road, Newton, MA

TO BE USED FOR: Wireless communication panel antennas on existing roof top arrays

EXPLANATORY NOTE: The petitioner seeks a special permit and site plan approval under Section 30-24 and 30-23, respectively. The petitioner must comply with all requirements of Section 30-18A(c) which governs the installation of new wireless equipment.

ZONING: Single Residence 2

Approved, subject to the following conditions:

1. The wireless antennas shall be located and constructed consistent with the plans entitled "Site Number 2028, Newton" prepared by James P. Stroke, P.E., of SAI Communications, 22 Keenwaydin Drive, Salem, NH 03079, dated 7/12/10, with revisions through 11/12/10, including the following sheets:
 - a. Sheet C-101 entitled "Site Plan"
 - b. Sheet E-101 entitled "Compound Plan and Elevations"
 - c. Sheet E-401 entitled "Enlarged Plans and Details"
 - d. Sheet E-601 entitled "Electrical Schematic Diagrams"
2. The equipment will be kept in good appearance and in good operating order at all times.
3. This Board Order shall supersede Board Order #722-86.
4. If the wireless communication use ceases, the petitioner shall be responsible for the removal of said equipment within thirty (30) days.

5. If new technological changes permit smaller or internal equipment, the petitioner shall take advantage of such changes and replace the equipment approved herein to the extent feasible at this location, and approval for such replacement shall not be unreasonably withheld by the property owner of 216 Herrick Road.
6. No building permit shall be issued pursuant to this special permit/site plan approval until the petitioner has:
 - a. recorded with the Registry of Deeds for the Southern District of Middlesex County a certified copy of this Board Order granting this special permit/site plan approval.
 - b. filed a certified copy of such recorded notice with the Clerk of the Board, the Inspectional Services Department and the Department of Planning and Development.
7. No portion of the building pursuant to this special permit/site plan approval shall be occupied until the petitioner has:
 - a. filed with the Department of Inspectional Services and the Department of Planning and Development, a statement by a registered engineer certifying compliance with Condition #1.

April 5, 2011

Joan Costello
Turning Mill Consultants
68 Tupper Road
Sandwich, MA 02563

SUBJECT: AT&T Mobility Site 2028 – Noise Study

Dear Joan,

I have conducted noise measurements at AT&T Mobility site 2028, located at 216 Herrick Road in Newton, MA, in order to assess compliance with the local noise ordinance.

The Noise Control Ordinance of the City of Newton, Section 20-13 of the City of Newton Ordinances, allows sources of noise to increase the background sound level by 10 dBA, or 5 dBA for tonal sounds. No other provisions or limits of the ordinance apply to this site. This limit is assumed to apply at the nearest property line.

Background Noise Levels

In order to establish the existing background sound level, as required by the ordinance, a sound level monitor was installed on the site and programmed to collect data for a period of two days, in one-hour intervals. The instrument used was a Rion model NL-31, which complies with ANSI S1.4 for Type 1 instrumentation.

The attached Figure 1 presents the L_{90} sound levels measured. The L_{90} represents the sound level exceeded during 90% of the measurement interval, and is commonly used to represent the background noise level.

The monitor was installed at a location where it would be shielded from the noise generated by the AT&T equipment. The location is shown in Figure 2.

The lowest L_{90} reached during the measurement period was 40 dBA. Therefore, the limit for equipment at this site is 50 dBA, or 45 dBA for tonal sounds.

Equipment Noise Levels

The base station equipment at this site is located in an indoor mechanical room within an existing building. The only exterior source of noise is a through-wall air-conditioning unit, approximately 4 feet above grade.

The nearest property line is approximately 95 feet to the southeast of the equipment.

Based on a sound level measurement conducted during my site visit, I have calculated that the contribution of this unit to the overall noise at the property line would be approximately 39 dBA.

This is well within the limit of 50 dBA, and is likely inaudible during all but the quietest hours.

Conclusion

This site complies with the Noise Control Ordinance of the City of Newton, Section 20-13 of the City of Newton Ordinances.

Please feel free to contact me with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric Reuter", with a long horizontal flourish extending to the right.

Eric L. Reuter, INCE Bd. Cert.
Principal

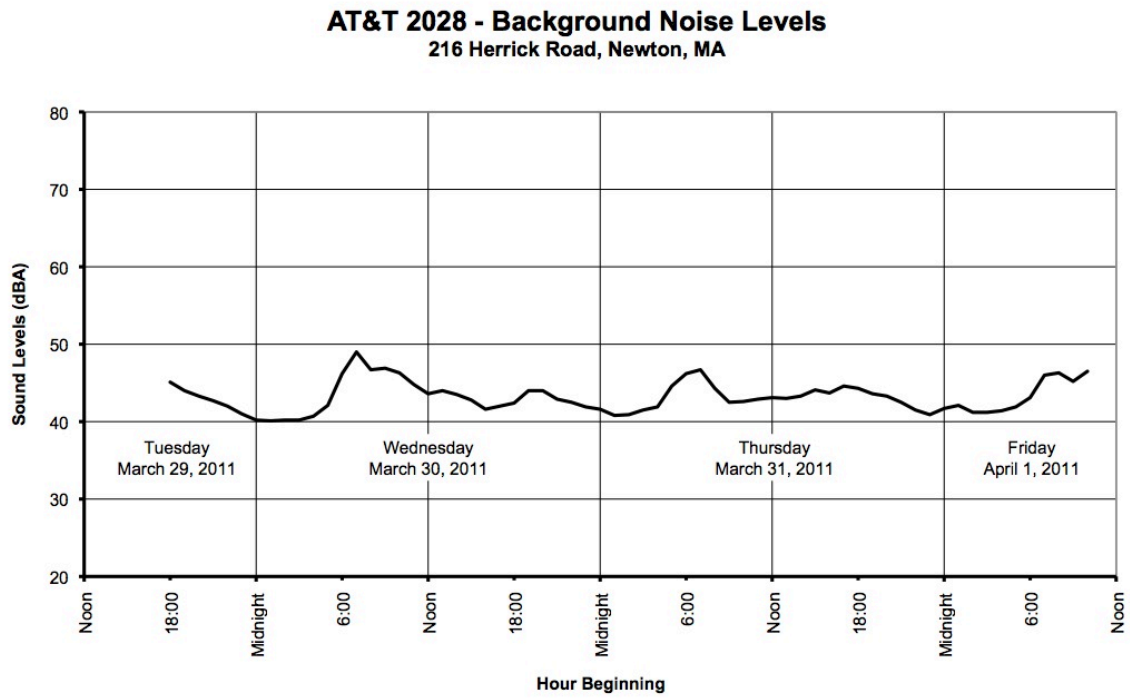


Figure 1 – Sound Monitor Data

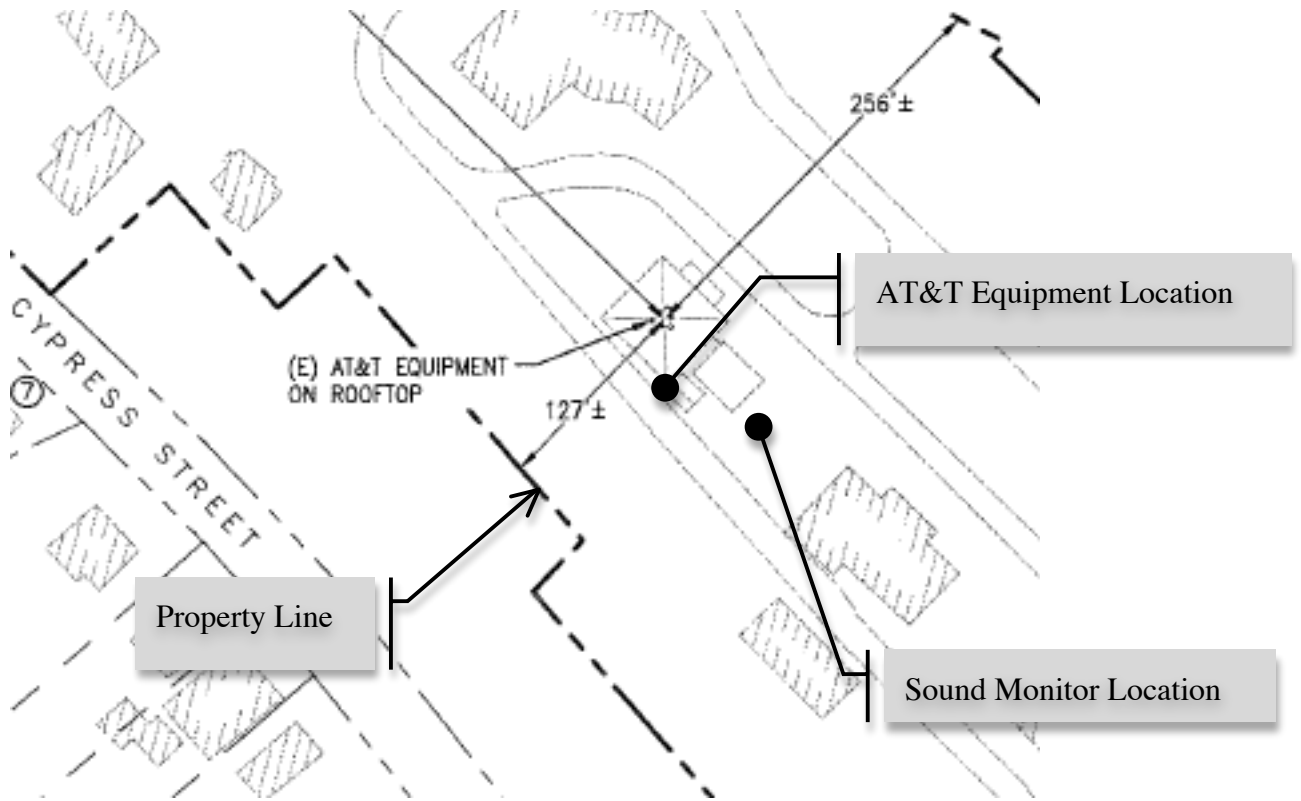
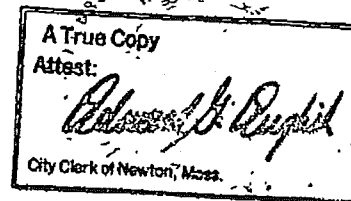


Figure 2 – Site Plan

72.

CITY OF NEWTON
IN BOARD OF ALDERMEN

January 20, 1986



ORDERED:

That the Board finding that the public convenience and welfare will be substantially served by its action and that said action will be without substantial detriment to the public good, and without substantially derogating from the intent of the Zoning Ordinance, the following SPECIAL PERMIT is hereby granted, in accordance with the recommendation of the Land Use Committee and the reasons given by the Committee therefor through its Chairman, Alderman Cynthia Creem.

Petition number: 722-86

Petitioner: Cellular One

Location: 97-239 Herrick Road, Ward 6, Section 61, Block 19,
Lot 45 containing approximately 1,788,233 square feet

Owner: Andover-Newton Theological School

Address of owner: 210 Herrick Road, Newton, Mass. 02159

To be used for: Roof top installation of antennas and associated
electronic equipment related to mobile telephone
communications

Construction: Copper, brass, fiberglass

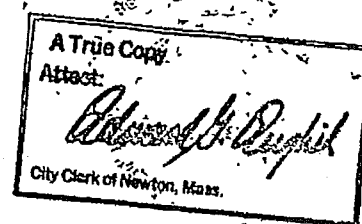
Explanatory note: Section 30-5(b)(9) requires permission from the
Board of Aldermen.

Land referred to is in the Single Residence C District

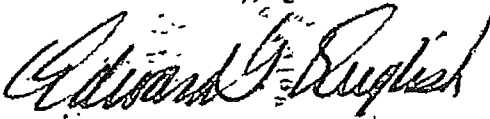
Approved, subject to the following conditions.

1. That the antennas shall be located and constructed consistent with plans entitled, "Cellular One Site and Location Plan" dated July 1, 1986, "Proposed Cell Site and Antennas Layout" dated July 11, 1986, and "Existing Building Layout and Details" dated July 15, 1986 all by Robert Olan Wetherbee p.e. and "Omnidirectional High Gain Antenna 740-198" specification by Kathrein, Inc. Cleveland, Ohio, submitted by the petitioner and filed herewith.
2. The applicant shall notify the Massachusetts Department of Public Health pursuant to 105CMR122.000;
3. The applicant shall notify the Massachusetts Department of Labor and Industries pursuant to 440CMR5.08(1);

4. Upon completion of the cell installation, power density testing shall be performed under the direction of the Newton Commissioner of Health at the expense of the applicant. Said testing shall be performed in all accessible areas proximate to the antenna installations. The exposure levels under conditions of maximum transmitter output shall not exceed the "Radio Frequency Exposure Limits for Public Exposures" as set forth in 105CMR122.000.
5. There shall be no exercise of this SPECIAL PERMIT until:
 - a. The petitioner shall have recorded with the Registry of Deeds for the Southern District of Middlesex County a certified copy of this Board Order granting this SPECIAL PERMIT with appropriate reference to the book and page of the recording of the petitioner's title deed or notice of lease endorsed thereon.
 - b. A certified copy of such recorded notice shall have been filed with the City Clerk, the Building Department and the Department of Planning and Development
 - c. The petitioner shall have complied applicable local, state and federal standards and with all requirements of the Massachusetts State Building Code, including obtaining appropriate permits from the Building Department and the Department of Planning and Development, a statement certifying thereto.



Under Suspension of Rules
Readings Waived and Approved
20 yeas 0 nay 2 absent
(Aldermen Creem and Taglienti)
1 excused (Jefferson)
1 vacancy



(SGD) EDWARD G. ENGLISH, City Clerk

The undersigned hereby certifies that the foregoing copy of the decision of the Board of Aldermen granting a SPECIAL PERMIT is a true accurate and copy of said decision; that all statutory requirements for the issuance of such SPECIAL PERMIT and all plans referred to in the decision have been filed with the Planning and Development Board and the City Clerk.

Twenty days have elapsed since the date of filing of the Board Order with the City Clerk and no appeal thereto has been filed.



ATTEST

EDWARD G. ENGLISH, City Clerk

